WHAT IS CLAIMED IS:

1. A method of determining a noise-corrected power delay profile, the method comprising:

determining a power delay profile;

calculating a noise-corrected power delay profile; and

wherein the step of calculating the noise-corrected power delay profile comprises using a biased noise-floor power estimate, the power delay profile, and a noise-scaling factor.

2. The method of claim 1, further comprising:

calculating a center-of-gravity position estimate; and

wherein the step of calculating the center-of-gravity position estimate comprises using the noise-corrected power delay profile.

3. The method of claim 1, wherein the noise-scaling factor is applied to the noise-floor power estimate.

4. The method of claim 1, wherein the noise-scaling factor is dependent upon a probability density function.

5. The method of claim 1, wherein:

the step of determining the power delay profile comprises using a first plurality of values; and

the step of calculating the noise-corrected power delay profile comprises using the first plurality of values and a second plurality of values.

6. The method of claim 5, wherein:

the first plurality of values is a plurality of power-delay-profile values N_p; and

the second plurality of values is the N_n smallest power-delay-profile values.

7. The method of claim 6, wherein the noise-scaling factor is dependent upon a probability density function of the biased noise-floor power estimate.

8. The method of claim 2, wherein:

Z is the biased noise-floor power estimate;

τ_k is a time delay;

γ is the noise-scaling factor;

h_k is a plurality of power values;

N_p is a plurality of the plurality of power values h_k; and

the center-of-gravity position estimate is $\frac{\sum_{k=1}^{N_p} \tau_k (h_k - \gamma Z)}{\sum_{k=1}^{N_p} (h_k - \gamma Z)}$.

9. The method of claim 1, wherein:

Z is the biased noise-floor power estimate;

γ is the noise-scaling factor;

h_k is a plurality of power values; and

the noise-corrected power delay profile is $h_k - \gamma Z$.

10. The method of claim 1, wherein:

σ_g^2 is the biased noise-floor power estimate;

Z^* is a mean power of a plurality of values h_k;

γ is the noise-scaling factor; and

$$\gamma = \frac{Z^*}{\sigma_g^2}.$$

11. The method of claim 1, wherein:

γ' is the noise-scaling factor;

$$\gamma' = \frac{N_{paths} + \gamma(N_p - N_{paths})}{N_p};$$

N_p is a plurality of power values;

N_{paths} is a number of true paths among the N_p power values

σ_g^2 is the biased noise-floor power estimate;

Z^* is a mean power of a plurality of power values N_n; and

$$\gamma = \frac{Z^*}{\sigma_g^2}.$$

12. The method of claim 2, further comprising:

determining the noise-scaling factor;

storing the noise-scaling factor for on-line use; and

wherein the step of determining the noise-scaling factor is performed offline and before the steps of determining the power delay profile, calculating the noise-corrected power delay profile, and calculating the center-of-gravity position estimate.

13. An apparatus for determining a noise-corrected power delay profile, the apparatus comprising:

a channel estimator;

a despreader; and

a delay estimator interoperably connected to the channel estimator and the despreader, the delay estimator for:

determining a power delay profile;

calculating a noise-corrected power delay profile; and

wherein the step of calculating the noise-corrected power delay profile comprises using a biased noise-floor power estimate, the power delay profile, and a noise-scaling factor.

14. The apparatus of claim 13, wherein the delay estimator is further for:

calculating a center-of-gravity position estimate; and

wherein the step of calculating the center-of-gravity position estimate comprises using the noise-corrected power delay profile.

15. The apparatus of claim 13, wherein the noise-scaling factor is applied to the biased noise-floor power estimate.

16. The apparatus of claim 13, wherein the noise-scaling factor is dependent upon a probability density function.

17. The apparatus of claim 13, wherein:

the step of determining the power delay profile comprises using a first plurality of values; and

the step of calculating the noise-corrected power delay profile comprises using the first plurality of values and a second plurality of values.

18. The apparatus of claim 17, wherein:

the first plurality of values is a plurality of power-delay-profile values N_p; and

the second plurality of values is the N_n smallest power-delay-profile values.

19. The apparatus of claim 18, wherein the noise-scaling factor is dependent upon a probability density function of the biased noise-floor power estimate.

20. The apparatus of claim 14, wherein:

Z is the biased noise-floor power estimate;

τ_k is a time delay;

γ is the noise-scaling factor;

h_k is a plurality of power values;

N_p is a plurality of the plurality of power values h_k; and

the center-of-gravity position estimate is $\frac{\sum_{k=1}^{N_p} \tau_k (h_k - \gamma Z)}{\sum_{k=1}^{N_p} (h_k - \gamma Z)}$.

21. The apparatus of claim 13, wherein:

Z is the biased noise-floor power estimate;

γ is the noise-scaling factor;

h_k is a plurality of power values; and

the noise-corrected power delay profile is $h_k - \gamma Z$.

22. The apparatus of claim 13, wherein:

σ_g^2 is the biased noise-floor power estimate;

Z^* is a mean power of a plurality of values h_k;

γ is the noise-scaling factor; and

$\gamma = \frac{Z^*}{\sigma_g^2}$.

23. The apparatus of claim 13, wherein:

γ' is the noise-scaling factor;

$$\gamma' = \frac{N_{paths} + \gamma(N_p - N_{paths})}{N_p};$$

N_p is a plurality of power values;

N_{paths} is a number of true paths among the N_p power values

σ_g^2 is the biased noise-floor power estimate;

Z^* is a mean power of a plurality of power values N_n; and

$$\gamma = \frac{Z^*}{\sigma_g^2}.$$

24. The apparatus of claim 14, further comprising:

determining the noise-scaling factor;

storing the noise-scaling factor for on-line use; and

wherein the step of determining the noise-scaling factor is performed offline and before the steps of determining the power delay profile, calculating the noise-corrected power delay profile, and calculating the center-of-gravity position estimate.

25. An article of manufacture for determining a noise-corrected power delay profile, the article of manufacture comprising:

at least one computer readable medium; and

processor instructions contained on the at least one computer readable medium, the processor instructions configured to be readable from the at least one computer readable medium by at least one processor and thereby cause the at least one processor to operate as to:

determine a power delay profile;

calculate a noise-corrected power delay profile; and

wherein the calculation of the noise-corrected power delay profile comprises using a biased noise-floor power estimate, the power delay profile, and a noise-scaling factor.

26. The article of manufacture of claim 25, wherein the processor instructions are further configured to cause the at least one processor to operate as to:

calculate a center-of-gravity position estimate; and

wherein the calculation of the center-of-gravity position estimate comprises using the noise-corrected power delay profile.